

REMARKS

Favorable reconsideration of the above-identified application, as presently amended, is respectfully requested.

The specification has been amended to correct the informalities noted by the Examiner and to insert section headings at the appropriate locations therein. The Examiner is thanked for bringing these informalities to Applicants' attention, and withdrawal of the objection to the disclosure is now believed to be in order and is respectfully requested.

Claims 1, 3, 6, 8, 10, 12, 16 and 24 have been amended to be in a more correct idiomatic English as suggested by the Examiner. In view of these amendments, all the claims are now believed to be clear and definite throughout, and withdrawal of the rejection of Claims 1 and 3-25 under 35 U.S.C. 112 as being indefinite is also respectfully requested.

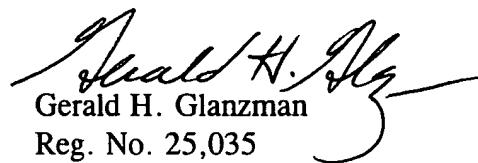
It is believed that entry of this Amendment is warranted under the provisions of 37 C.F.R. § 1.116 as placing the application in condition for allowance. The Amendment corrects informalities in the specification and claims and raises no new issues that would require further search and consideration by the Examiner.

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In view of the foregoing, Applicants believe this application is now in allowable form, and respectfully request that the Examiner so find and issue a Notice of Allowance in due course.

Respectfully submitted,

JENKENS & GILCHRIST,
A Professional Corporation



Gerald H. Glanzman
Reg. No. 25,035

1445 Ross Avenue, Suite 3200
Dallas, Texas 75202-2799
(214) 965-7343
(214) 855-4300 (fax)



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EXHIBIT A
MARKED-UP SPECIFICATION

On page 1, line 5, insert the following heading:

--Background of the Invention--

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Please amend the paragraph on page 1, lines 19-28 as follows:

--In terms of a modular structure the entire protocol of a communication is divided into layers. Each layer solves the tasks allocated to it by means of [an] its own protocol. A communication between the adjacent layers is guaranteed via clearly defined interfaces. In this case, a layer n is linked to the layer n+1 directly on top thereof by rendering services to said layer, and to layer n-1 directly beneath said layer by using the services of said layer. Additionally there is a communication with layer n of the communication partner by using the services of all inferior layers. Thus, the logical data flow of protocol data units PDU is realized on respectively one protocol layer. On the receiving side the data are processed in a reverse sequence, i.e. the data are released from the lower layers to the protocol layers directly on top thereof.

Please amend the paragraph on page 2, lines 11-22 as follows:

The transport protocol TCP offers a reliable transmission service for a byte flow.

Reliability hereby refers to being free of errors, maintenance of sequences and protection against datalosses and duplicates. The error correction takes place by using the so-called ARQ (automatic repeat request) method. A copy of the [packets] packet to be sent is generated on the

transmitting side and preserved until the data packet sent is generated on the transmitting side and preserved until the data packet sent is positively acknowledged by the opposite side. The receiver examines the packet received and acknowledges the correct receipt by means of a positive acknowledgment and rejects the receipt of an incorrectly received packet. In this respect [is] it has to be noted that TCP does not allow the transmission of negative acknowledgments. The repeat of an incorrectly transmitted [packets] packet is effected by means of a mechanism based on the positive acknowledgments, i.e. if there is no positive acknowledgment the transmitter concludes under certain circumstances that a packet has not been received.

Please amend the paragraph on page 2, lines 24-31 as follows:

The byte flow to be transmitted, which is passed from the application layer to the TCP layer, is divided into segments by the TCP for being transmitted as IP datagrams. An IP datagram designates a data packet being formatted according to the rules of the IP protocol. The property of datagrams consists in that the data exchange being realized by using datagrams is not reliable. Thus, the IP does not guarantee that a packet is indeed transmitted to a receiver. Also IP datagrams can be confused in their sequence, or can arrive at the receiver in duplicates. Within the limits of this concept it is, however, the task of TCP to detect the faulty transmission and to correct the errors that have occurred.

Please amend the paragraph on page 3, lines 1-7 as follows:

The IP datagrams are, moreover, transmitted according to the hierarchy principle to the link layer arranged directly underneath. Said layer receives the IP datagrams and organizes them in so-called frames. This takes place by means of a method [being known under the name of] referred to as framing, i.e. the link layer packages an IP datagram in one or more frames, wherein the frames are limited by using specific bit combinations. It is specified as to which bit combination refers to the beginning separator, the so-called initial mark, and which to the end separator, the so-called end mark, of a frame.

Please amend the paragraph on page 3, lines 19-26 as follows:

Protocols of the link layer are usually applied between physically directly adjacent network nodes. For this purpose a number of alternative protocols have been defined. As to which protocol is applied between two network nodes depends on the network by means of which the two network nodes are linked. The known point-to-point protocol, the PPP, forms an example for a protocol of the link layer. The PPP fulfills the first two jobs of the link layer - the framing and the error detection. Thus, the PPP does not perform a repeat of the incorrectly received packets. Even though there is a specific implementation mode of PPP working in a so-called, [,,] “numbered mode” RFC1663, it is usually not used.

On page 7, in line 19, please insert the following heading:

--Summary of the Invention--

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Please delete the entire paragraph on page 7, lines 25 and 26.

[According to the invention said object is provided by the teaching of patent claim 1 and by the teaching of patent claim 24.]

Please delete the entire paragraph on page 8, lines 11 and 12.

[Additional advantageous forms of the invention can be inferred from claims 2 to 23 and patent claim 25.]

On page 8, line 13, please insert the following heading:

--Brief Description of the Drawings--

Please delete the entire paragraph on page 8, line 26.

[In the following, the invention is explained by means of figure 1 and patent claim 1.]

On Page 8, line 27, please insert the following heading:

--Detailed Description of Exemplary Embodiments--

Please delete the entire paragraph on page 9, line 19.

[In the following, the invention is explained by means of patent claim 24.]

Please amend the paragraph on page 12, lines 1-9 as follows:

Said distinction is taken into account on the network protocol layer, such as the IP layer.

Said layer [comprises] receives packets from the transport protocol layer and packages them to form packets of their own format. Figure 5 illustrates a format of an IP packet. Said packet contains control data among which, for instance, the version of the IP protocol is included, for instance, IPv4 or IPv6. This has not been shown in detail in figure 5. Moreover, the IP data format is provided with a field containing the information in respect of the transport protocol. In case of a UDP protocol this means that a bit combination is entered into said field, which corresponds to the designation of the UDP.

Please amend the paragraph on page 15, line 29 as follows:

The same refers to the UDP, where the change of the sequence of the packet is [admitted] permitted.

Please amend the paragraph on page 15, lines 31 and 32 as follows:

In the following, an implementation of the invention [according to patent claim 16] for the inter-flow mode is explained in more detail by means of figure 7.

Please amend the paragraph on page 17, lines 29 and 30 as follows:

In the following, said embodiment is explained in more detail by means of figure 8 [and patent claim 17].



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EXHIBIT B
MARKED-UP VERSION OF CLAIMS

1. (Twice Amended) Method for improving a processing time of received data in packet oriented applications in a data transmission of data flows between a transmitter and a receiver, each transmission [comprising] involving a first and a second protocol layer and being carried via a communication network, wherein said method comprises:
 - 5 providing a data flow at the first protocol layer as data packets of the first protocol layer;
 - 7 releasing data from the first protocol layer to the second protocol layer in the transmitter;
 - 9 dividing the data of the first protocol layer into consecutive data packets of the second protocol layer by generating a sequence of data packets with [a] sequence [number] numbers, wherein a data packet of the second protocol layer contains data from only one data packet of the first protocol layer;
 - 13 transmitting the data packets of the second protocol layer to the receiver via the communication network;
 - 15 sorting received data packets of the second protocol layer at the receiver according to the sequence of the data packets;
 - 17 allocating received data packets of the second protocol layer to data packets of the first protocol layer [on], in the second protocol layer; and
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19 upon a data packet of the first protocol layer being completely generated from a group
20 of data packets of the second protocol layer allocated to the first protocol layer, examining said
21 completely generated data packet for an association to a data flow, and releasing said completely
22 generated data packet to the first protocol layer.

1 3. (Twice Amended) Method according to claim 1 wherein the data packets of the
2 second protocol layer are numbered consecutively and marked by [a] corresponding sequence
3 [number] numbers.

1 6. (Twice Amended) Method according to claim 1, wherein the data packets of the
2 first protocol layer are clearly differentiated from each other by means of separators.

1 8. (Twice Amended) Method according to claim 3, wherein [the] each sequence
2 number is an RLP (Radio Link Protocol) sequence number or an RLC (Radio Link Control)
3 sequence number.

1 9. Method according to claim 1, wherein the received data packets are stored in a
2 buffer of the receiver.

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1 10. (Twice Amended) Method according to claim 1, wherein a data packet of the first
2 protocol layer is [brought into] given a status of a completely generated data packet, if both [the]
3 an initial and [the] an end mark within data packets of the second protocol layer have correctly
4 been received, and if all data packets of the second protocol layer lying in between have correctly
5 been received [according to their correct sequence].

1 12. (Twice Amended) Method according to claim 1, wherein at least one control field
2 comprising control data is provided in the completely generated data packets of the first protocol
3 layer, for delivering the information [in view] of a pertinent data flow.

1 16. (Twice Amended) Method according to claim 1, wherein the data packets of the
2 first protocol layer are directly released to the first protocol layer on the second protocol layer, if
3 the data packets [on] of the second protocol layer have firstly been received completely and
4 correctly, and if secondly it has been guaranteed that the data possibly buffered by the receiver of
5 the second protocol layer do not contain additional data packets of the first protocol layer
6 belonging to the same data flow of the data packets of the first protocol layer to be released.

24. (Twice Amended) Device for improving a processing time of received data in
packet oriented applications in a data transmission of data flows between a transmitter and a

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receiver, each transmission [comprising] involving a first and a second protocol layer and being carried via a communication network, said device comprising:

means for providing data packets of a first protocol layer to a second protocol layer, wherein the data of the first protocol layer is divided into consecutive data packets of the second protocol layer by generating a sequence of data packets with [a] sequence [number] numbers, and wherein a data packet of the second protocol layer contains data from only one data packet of the first protocol layer;

transmitting means for transmitting the data packets of the second protocol layer;

receiving means for receiving the transmitted data packets;

means for sorting the received data packets according to the sequence of the data packets, and for allocating the received data packets to data packets of the first protocol layer [on], in the second protocol layer;

recognizing means for recognizing that a data packet of the first protocol layer has been completely generated from a group of data packets of the second protocol layer allocated to the first protocol layer;

means for examining said completely generated data packet for an association to a data flow; and

releasing means for releasing said completely generated data packet to the first protocol layer.